Results: 1419 BCSP colonoscopies (1339 patients) were performed. 109 were repeats with median interval to repeat 378 days. Indication for prior colonoscopy included prior BCSP invitation (n=90), polyp surveillance (n=6) and symptoms (n=13). Colorectal cancer was identified in 111 patients, though none had had previous colonoscopy. Cancer yield in first time BCSP colonoscopy was greater than in repeated colonoscopy (8%vs 0% p=0.002).
Conclusion: Cancer yield is reduced in BCSP patients with a recent negative colonoscopy. Excluding such patients would reduce pressure on endoscopy units and the morbidity of the procedure but increases the risk of missing pathology. To inform national guidance larger studies would be needed.

0666: HAND-SEWN ANASTOMOSIS INCURS HIGHER RISK OF LEAK FOLLOWING REVERSAL OF ILEOSTOMY COMPARED TO STAPLED TECHNIQUE

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Aim: To investigate the anastomotic leak-rate following reversal of ileostomy operations in a single centre.
Methods: A retrospective database of reversal of ileostomy operations between January 2007 and December 2010 was compiled. Technique and materials used in anastomosis construction, patient demographic, and pathological data was collected. Data was analysed to determine the anastomotic leak-rate and factors influencing risk of leak.
Results: 123 operations were identified. 5 anastomotic leaks were identified (leak-rate 4.07%). Hand-sewn (n=4/30, 13.33%) versus stapled technique (n=1/93, 1.08%) significantly incresed risk of leak, p=0.0125. No other factors influenced risk of leak. All leaks required laparotomy, there was no mortality.
Conclusions: A hand-sewn versus stapled anastomosis significantly increases the risk of leak following reversal of ileostomy.

0674: LAPAROSCOPIC TECHNIQUE REDUCES DURATION OF HOSPITAL ADMISSION FOLLOWING ANTERIOR RESECTION

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Aim: To investigate short-term outcomes following laparoscopic versus open anterior resection.
Methods: A retrospective database of anterior resections between January 2007 and December 2010 was compiled. Data for surgical approach, materials and methods used in construction of anastomosis, anastomotic leak, and duration of postoperative admission was collected & analyed.
Results: 173 anterior resections were identified. 10 leaks were identified but no significant factor was identified as influencing risk of leak. Mean duration of hospital stay was significantly lower following laparoscopic (7 days, SD±5.4) and laparoscopic-converted (10 days, SD±6.8) operations compared to open procedure (16 days, SD±25.0), 1-way ANOVA p=<0.0001.
Conclusions: Laparoscopic technique reduces duration of hospital admission following anterior resection compared to open technique.

0726: THE ROLE OF 'NEUTROPHIL-TO-LYMPHOCYTE RATIO' IN PREDICTING OUTCOMES OF PATIENTS WITH LOCALLY ADVANCE RECTAL CANCERS

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Aims: To study the role of pre-treatment 'neutrophil-to-lymphocyte ratio (NLR)' as a new predictive marker in management of patients with locally advance rectal cancer(LARC).
Methods: We undertook a retrospective review of all consecutive patients with LARC who underwent curative treatment at Mount Vernon Cancer Centre between 1998-2008. Patients with incomplete data were excluded. We analysed the role of NLR in predicting (i) clinical staging, (ii) response to neoadjuvant chemoradiotherapy, and (ii) long-term prognosis. Statistical significance is set at p <0.05.
Results: A total of 225 patients (M:F=2:1;Age(mean;range)=64:30-89 years) were included. The NLR increased proportionally with higher clinical T-stage (F (2,200) =9.5, p <0.001) and held predictive value (p 0.001;CI 0.1,0.4). There was significant tumour down-staging (cTNM vs ypTNM; T-stage = Z -6.8,p <0.001, N-stage = Z -6.3,p <0.001), but NLR had no role in predicting response (OR 0.86, p 0.13). For long-term outcomes, NLR is associated with high death rate in univariate analysis (t 2.16, p 0.03) but not in multivariate regression analysis (local recurrence-OR 1.17, p 0.18; distant metastasis – OR 1.14 p 0.12;death rate - OR 0.97, p 0.75).
Conclusion: Pre-treatment NLR may have a role in predicting preclinical staging and high death rate in patients with LARC.

0746: ALTERATION IN ENTEROENDOCRINE CELL POPULATION IN EARLY COLONIC NEOPLASIA

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Aims: Although enteroendocrine cells (EECs) play a critical role in regulating gastrointestinal physiology their role in colorectal carcinogenesis is under-investigated. EECs express receptors for short-chain fatty acids (SCFAs), the bacterial fermentation products of dietary fibre, including butyrate. We investigated the association of EEC expression with faecal SCFA levels in normal and neoplastic colonic epithelium.
Methods: Endoscopic biopsies from normal and adenoma patient groups were taken at the morphologically normal mid-sigmoid and at the adenoma and its contralateral field (where present). Immunohistochemical staining was performed for EEC markers: chromogranin-A (CgA), GLP-1 and somatostatin. Stool samples were collected for SCFA analysis.
Results: CgA expression was observed in a small number of singly dispersed cells, accounting for up to 1.4% of those in normal crypts. In mid-sigmoid sections the CgA+ fraction was significantly higher in low butyrate groups (1.82%) than in high ones (1.11%) (P = 0.037). Within the contralateral field the CgA+ fraction was reduced overall, but association with butyrate levels was lost.
Conclusions: The EEC population is reduced in the vicinity of colonic neoplasia, suggesting a field effect. Numbers also decreased with increasing SCFA concentrations at sites distant to the neoplasm. EECs may therefore play a role in early colorectal carcinogenesis.

0763: HOW EFFECTIVE IS A NOVEL BOWEL MANAGEMENT PROGRAMME, INCLUDING BIOFEEDBACK, FOR THE MEDIUM-TERM MANAGEMENT OF PATIENTS WITH FAECAL INCONTINENCE?

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Introduction: There has long been conflicting evidence on the efficacy of biofeedback when used in faecal incontinence (FI). This study evaluated the effectiveness of biofeedback in patients with FI within a novel bowel management programme.
Methods: Prospective data was collected from 2009 -2012 of 200 consecutive patients who underwent a 3-stage nurse specialist-led bowel management programme. Outcomes were assessed using bowel diaries, Likert scale and Wexner/SF-36 scores with patients being discharged if satisfied with symptom improvement (primary endpoint). All discharged patients received telephone follow-up.
Results: 58 patients met the primary endpoint and were discharged at stage 1, 97% still met the primary endpoint at mean follow-up of 20 months. 65/72 stage 2 patients met the primary endpoint, with improvements in defecations/day [mean baseline: 3.8 (1-20) vs. post-biofeedback: 1.8 (1-6) P<0.001], deferment time (mins) [mean baseline: 5.2 (0.5-60) vs. post-biofeedback: 12.0 (2-60) P<0.002] and incontinent episodes/week [mean baseline: 3.6 (0-35) vs. post-biofeedback: 0.4 (0-7) P<0.001]. There were significant improvements in SF-36, Likert/Wexner scores. 88% of stage 2 patients still met the primary endpoint at mean follow-up of 18 months. 70 patients moved onto stage 3 with 7% requiring surgery.
Conclusion: Biofeedback has a significant role in the medium-term management of FI.

0769: ANTERIOR RESECTION SYNDROME- EFFECTIVE SHORT-TERM MANAGEMENT VIA A NOVEL BOWEL MANAGEMENT PROGRAMME

Craig Rimmer, Kelly Stackhouse, Neil Cruickshank, Kathryn Gill. *Sandwell and West Birmingham Hospitals NHS Trust, West Bromwich, UK.*

Introduction: Anterior resection syndrome (ARS) can affect up to 70% of patients, with no standard treatment currently available. This study evaluated the effectiveness of a novel 3-stage bowel management programme in patients with ARS.
Methods: Prospective data was collected from 31 consecutive patients, with symptoms of ARS, who underwent a 3-stage nurse specialist-led bowel management programme (stage 1-conservative management, stage 2-biofeedback, stage 3-neuromodulation). All patients underwent a low or ultra-low anterior resection. Outcomes were assessed using bowel diaries, Wexner/SF-36/GIQoL scores, with patients being discharged if satisfied with symptom improvement (primary endpoint).
Results: All patients completed treatment with 90% meeting the primary endpoint. 5 patients completed stage 1 and were discharged. 18 patients completed stage 2 with improvements in defecations/day [mean baseline: 7.2 (1-15) vs. post-biofeedback: 2.4 (1-4) $P<0.001$], leakages /day [mean baseline: 6.5 (1-14) vs. post-biofeedback: 0.1 (0-1) $P<0.001$], deferment time (mins) [mean baseline: 3.5 (0.5-15) vs. post-biofeedback: 11.6 (2-30) $P<0.001$] and incontinent episodes/week [mean baseline: 4.4 (0-28) vs. post-biofeedback: 0.1 (0-1) $P<0.007$]. Significant improvements were seen in Wexner/QOL scores. 8 patients completed stage 3, with significant improvement in outcomes. Mean follow-up was 17 weeks (4-44).
Conclusion: A 3-stage bowel management programme is effective in the short-term management of ARS.

0777: SIGMOID VOLVULUS IN THE ELDERLY, OUTCOMES FOLLOWING VARIOUS TREATMENT MODALITIES

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Aims: Sigmoid volvulus is a common cause of large bowel obstruction in the UK. Definitive management of this problem though is difficult as many of these patients are elderly and have multiple significant co-morbidities, but without it recurrence is common. The aim of this study was to assess the outcomes of various treatment modalities for sigmoid volvulus.
Methods: Morbidity, mortality and recurrence data was collected for the treatment of patients admitted between April 2007 and December 2011 with a diagnosis of sigmoid volvulus. Treatment was conservative, operative or by Percutaneous endoscopic colostomy (PEC).
Results: 53 patients fulfilled inclusion criteria. 13 were managed conservatively with recurrent decompression, 33 with PEC and 7 with operation. In patients who had conservative management, the recurrence rate and mortality rates were 69.2% and 30.7% respectively. In the PEC group, the recurrence rate was 3% and the overall mortality was 15.5%. Elective surgery was performed in 5 patients and emergency surgery in 2. There were no recurrences but the overall complication rate was 57.1% and the mortality 28.6%.
Conclusions: PEC appears to be a safe alternative for the management of sigmoid volvulus with acceptable recurrence rates, avoiding the need for an operation.

0824: FINANCIAL ANALYSIS OF A ONE- STOP COLORECTAL CLINIC (OSCC)

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Aim: To assess the economic impact of a OSCC clinic versus traditional colorectal clinic.
Method: A OSCC was established to investigate and treat non-cancer colorectal referrals on the same day. This involves consultation, with suitable patients offered a flexible-sigmoidoscopy that day. Attendance and outcome data was collected between June and November 2012. Standard hospital tariffs were used to calculate costs.
Results: 182 patients included (6% DNA rate); mean age 51.6; 87 Males. Thirty percent (n=51) were deemed suitable for flexible-sigmoidoscopy of which 63% had their scope the same day. Nineteen declined or endoscopy was unavailable. Of the same day endoscopies, 72% were discharged with haemorrhoids ± intervention (n=18), diverticulosis (n=3) or other (n=2), whilst 28% were referred for further tests. Using standard hospital tariffs for clinic appointments and flexible sigmoidoscopy to compare OSCC and traditional pathways of referral, there is potential savings of £156.32 per patient. This study of 182 patients suggested a total saving of £4,064.32.
Conclusion: Running an OSCC can save money for any Hospital Trust and can also reassure patients that they do not have a serious diagnosis the same day. To further assess this service patient satisfaction surveys are planned

0878: REDUCTION IN BODY WEIGHT PREDICTING METABOLIC COMPLICATION OF NEWLY FORMED ILEOSTOMY

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Aims: To investigate whether a decrease in body weight of ileostomy patients can predict development of dehydration.
Methods: Body weight of ileostomy patients over four week period from hospital discharge was prospectively recorded and monitored. Details of any hospital admission due to dehydration were noted. Weight loss was defined as the maximum reduction in body weight during the study period or the readmission weight.
Results: A total of 49 patients completed the study, the majority of whom [75.5% (n=37)] exhibited weight loss at some point during the study period with 29.7 % (n=11) of them requiring hospitalisation secondary to HOS. In contrast, 24.5% (n=12) of the cohort maintained or improved their discharged weight with no metabolic complications observed. Furthermore, weight loss as percentage of discharged weight was calculated. Patients with dehydration lost significantly more weight in comparison to those who remained well (5.5 % range [3%-6.4%] versus 2.1% range [0.3%-5%] respectively). Sensitivity, specificity and positive predictive value of 5% body weight reduction predicting stoma complications were, therefore, calculated (90.9%, 92.1% and 76.9% respectively).
Conclusions: reduction in body weight can predict development of metabolic complications of newly fashioned ileostomy. A validation study is currently being undertaken.

0907: A PROSPECTIVE 30-DAY OBSERVATIONAL STUDY OF SURGICAL SITE INFECTION IN PATIENTS UNDERGOING ELECTIVE AND EMERGENCY COLORECTAL SURGERY

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Aim: Surgical site infection (SSI) is a frequent complication of colorectal surgery causing morbidity. The purpose of this study was to audit incidence and factors associated with SSI in patients undergoing colorectal surgery, up to 30-days post operatively.
Methods: A prospective observational study was performed where SSI was defined using CDC guidelines. Patients undergoing elective and emergency colorectal surgery with bowel resection over a 10-month period were included. Follow up at 30-days was by telephone with GP or patient. Infection was recorded only if antibiotics were required.
Results: 93 patients were included. 23% underwent emergency resection. Prior to discharge 24.7% of total cases developed SSI; 8.6% superficial and 16.1% organ space SSI. On 30-day discharge follow-up, 11.8% had additionally developed superficial SSI. SSI was significantly more frequent with contaminated/dirty abdominal wounds (66%, p=.027) and patients with IBD (55%, p=0.17). 47% of organ space SSI developed after faeculent peritonitis. There was a non-significant trend towards increased SSI in immuno-suppressed and malnourished patients.
Conclusion: The rate of SSI reported reflects the mix of elective and emergency patients in this study and emphasizes the frequency of infection seen in colorectal surgery. Systems to detect and record infection are important to maintain good outcomes

0917: PATIENT OUTCOMES FOLLOWING LAPAROSCOPIC VENTRAL RECTOPEXY

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Aim: To measure global pelvic floor outcomes following laparoscopic ventral rectopexy (LVR) for rectal prolapse and obstructive defaecation disorders.
Method: We invited all women, who were listed for an LVR at our unit, to fill in ePAQ (electronic personal assessment questionnaire) pre- and post-